

ABSTRACT OF THE DISCLOSURE

A process for melting material to be treated includes placing material to be treated in a container that may include an insulating lining, heating the material to be treated and melting the material to be treated, preferably allowing the melted material to cool to form a vitrified and/or crystalline mass, and disposing of the mass. The mass is either disposed while contained in container or removed from container after cooling and disposed. Insulating lining may comprise one or more layers of a thermal insulating material, one or more layers of refractory material, or a combination thereof. The material to be treated may be heated by placing at least two electrodes in the material to be treated and passing a current between the electrodes, or alternatively, by placing at least one heating element in the material to be treated and passing heat into the material to be treated.